

## KEIM Restauro®-Fuge (Joint Mortar)



### 1. Product description

Mineral dry bagged joint mortar with hydraulic binders.

### 2. Field of application

KEIM Restauro-Fuge is a joint replacement material, especially well suited for natural stone and other fair-faced masonry walls (brickwork, calcareous sandstone, Limestone, Terra cotta, etc.).

### 3. Product properties

#### Material characteristics acc. to WTA technical bulletin 3-11-97/D

- Bulk density: approx. 1.55 g/cm<sup>3</sup>
- Water consumption: approx. 0.15 l/kg  
(approx. 5.1 fl oz per kg)
- Working time: at most 45 minutes
- Setting time: approx. 5 hours
- Compressive strength: approx. 8 N/mm<sup>2</sup>
- Bending tensile strength: approx. 3 N/mm<sup>2</sup>
- Modulus of elasticity: approx. 9 KN/mm<sup>2</sup>
- Thermal dilatation: approx.  $7 \times 10^{-5}$  (1/K)
- Hygric dilatation: approx. 0.7 mm/m

#### Color shade

Standard shades in accordance with natural stone color swatches or special shades to match stone sample. Slight variations in shade after the setting time due to the water quantity added cannot be ruled out.

### 4. Application instructions

#### Application temperature

Ambient and substrate temperature must not fall below +5°C (41°F).

#### Substrate preparation

##### Raking out:

Defective joint material and any cement joints must be completely raked out to a depth of at least twice the joint width.

##### Cleaning:

The open joints should be carefully cleaned with a water jet.

##### Pre-wetting:

The joint mortar must only be placed in moist joints. Adequate pre-wetting is absolutely essential. Surface should be wet but with no standing water, remove any excess water with a sponge.

#### Application

##### Mixing:

KEIM Restauro-Fuge is mixed with water only, approx. 4.5 l (1.2 gal) per 30 kg. Use a hand mixer or professional mixer for larger quantities. After a maturing period of 5 minutes, the mortar should have the consistency of moist soil.

##### Pointing:

Press the matured joint mortar firmly into the joint with a jointing tool. The new joint material should not be smoothed at the surface. In the case of flush joints, KEIM Restauro-Fuge is applied to above the stone surface and any excess is then removed with a scraper during setting. In other cases, the surface of the joint is carefully roughened with the sharp edge of the jointing tool.



**Consumption**

Approx. 0.2 kg/linear meter (0.06 kg/ft) at a joint depth and width of 1 x 1 cm (0.4 x 0.4 in).

0.4 kg/linear meter (0.12 kg/ft) at a joint profile of 1 x 2 cm (0.4 x 0.8 in).

**Note**

During any prior stone repair work with KEIM Restauro-Top, joints should be kept open or immediately remove repair material from joint area before it dries. Wide joints can be kept open with a polystyrene foam insert, smaller joints with appropriate width shims or spacers inserted between the stones.

**Cleaning of tools**

Clean with water immediately after use.

**5. Packaging**

30 kg sacks

**6. Storage**

12 months in original unopened sack under dry conditions.

**7. Hazardous substances ordinance class**

Xi Irritant,

R 38: Irritating to the skin.

R 41: Risk of serious damage to the eyes.

S 2: Keep out of reach of children.

S 22: Do not breathe dust.

S24/25: Avoid contact with skin and eyes.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39: Wear suitable gloves and eye/face protection.

S 46: If swallowed, seek medical advice immediately and show this container or label.

**8. Transport hazard class**

n/a

**9. Disposal**

EC Waste Code no. 17 01 01

Any residues must be emptied out of sacks before recycling.

Solidify any residual material with water and, after consulting the relevant authorities, dispose of in a building material landfill site.

**10. Safety instructions**

Provide appropriate protection for surfaces which are not to be treated. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with water. Protect the eyes and skin from splashes. When using, do not eat, drink or smoke. Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

